Amendments to the Claims

1. (Currently amended) A silicon compound represented by Formula (1):

in Formula (1), seven R¹'s are groups independently selected respectively from the group consisting of hydrogen, alkyl, substituted or non-substituted aryl and substituted or non-substituted arylalkyl; A¹ is an organic group substituted with a halogenated sulfonyl group; in this the alkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; and in the alkylene in this moiety of the arylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or -CH=CH-.

2. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of hydrogen, alkyl having a carbon number of 1 to 45, substituted or non-substituted aryl and substituted or non-substituted arylalkyl; in this-the alkyl group having a carbon number of 1 to 45, optional-hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; and

in the alkylene in this moiety of the arylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or -CH=CH-.

- 3. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of hydrogen and alkyl having a carbon number of 1 to 30; and in the alkyl group having a carbon number of 1 to 30, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or cycloalkylene.
- 4. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of alkenyl having a carbon number of 1 to 20 and a group in which optional -CH₂- is substituted with optionally replaced by cycloalkenylene in alkyl having a carbon number of 1 to 20; in the alkenyl having a carbon number of 1 to 20, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or cycloalkylene; and in the group in which optional -CH₂- is substituted with optionally replaced by cycloalkenylene in alkyl having a carbon number of 1 to 20, optional hydrogen may be substituted with optionally replaced by fluorine.
- 5. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of naphthyl and phenyl in which optional hydrogen may be substituted with optionally replaced by halogen or alkyl having a carbon number of 1 to 10; in this the alkyl group having a carbon number of 1 to 10, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or phenylene.

6. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of phenylalkyls in which optional hydrogen on a benzene ring may be substituted with optionally replaced by halogen or alkyl having a carbon number of 1 to 12;

in this_the alkyl group having a carbon number of 1 to 12, optional-hydrogen may be substituted with_optionally replaced by fluorine, and optional- -CH₂- may be substituted with_optionally replaced by -O-, -CH=CH-, cycloalkylene or phenylene; and in the alkylene in_moiety of the phenylalkyl group, which has a carbon number of 1 to 12, optional-hydrogen may be substituted with_optionally replaced by fluorine, and optional--CH₂- may be substituted with_optionally replaced by -O- or -CH=CH-.

7. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are groups independently selected respectively from the group consisting of alkyl having a carbon number of 1 to 8, phenyl, non-substituted naphthyl and phenylalkyl;

in the alkyl group having 1 to 8 carbon atoms, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene;

in the phenyl, optional hydrogen may be substituted with optionally replaced by halogen, methyl or methoxy;

in phenyl in the phenylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, alkyl having a carbon number of 1 to 4, ethenyl or methoxy; in the alkylene in moiety of the phenylalkyl group, it has a carbon number of 1 to 8, and optional -CH₂- in the alkylene moiety may be substituted with optionally replaced by -O- or -CH=CH-.

8. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are one group selected from the group consisting of alkyl having a carbon number of 1 to 8, phenyl, non-substituted naphthyl and phenylalkyl;

in the alkyl having a carbon number of 1 to 8, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene;

in the phenyl, optional hydrogen may be substituted with optionally replaced by halogen, methyl or methoxy;

in phenyl in the phenylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, alkyl having a carbon number of 1 to 4, ethenyl or methoxy; in the alkylene in moiety of the phenylalkyl group, it has a carbon number of 1 to 8, and optional -CH₂- in the alkylene moiety may be substituted with optionally replaced by -O- or -CH=CH-.

9. (Currently amended) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are one group selected from the group consisting of phenyl, naphthyl and phenylalkyl;

in the phenyl, optional hydrogen may be substituted with optionally replaced by halogen, methyl or methoxy;

in phenyl in the phenylalkyl group, optional-hydrogen may be substituted with optionally replaced by fluorine, alkyl having a carbon number of 1 to 4, ethenyl or methoxy; in the alkylene in moiety of the phenylalkyl group, it has a carbon number of 1 to 8, and optional -CH₂- in the alkylene moiety may be substituted with optionally replaced by -O-.

- 10. (Original) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are ethyl, 2-methylpropyl, 2,4,4-trimethylpentyl, 3,3,3-trifluoropropyl, cyclopentyl, cyclohexyl or non-substituted phenyl.
- 11. (Original) The silicon compound as described in claim 1, wherein seven R¹'s in Formula (1) are non-substituted phenyl.

12. (Currently amended) The silicon compound as described in any of claims 1 to 11, wherein A¹ in Formula (1) described in claim 1 is a group represented by Formula (2):

$$\begin{array}{c}
\left(R^{2}\right)_{a} \\
X - S \\
0
\end{array}$$
(2)

in Formula (2), X is halogen; R² is alkyl having a carbon number of 1 to 3; a is an integer of 0 to 2; Z¹ is a single bond or alkylene having a carbon number of 1 to 10; in this_the alkylene having a carbon number of 1 to 10, optional—CH₂- may be substituted with optionally replaced by -O-, -COO- or -OCO-; and both of the bonding positions of halogenated sulfonyl and R² on a-the benzene ring are optional positions.

- 13. (Currently amended) The silicon compound as described in claim 12, wherein Z^1 in Formula (2) is Z^2 - C_2H_{\square} -; Z^2 is a single bond or alkylene having a carbon number of 1 to 8, and optional -CH₂- in this_the alkylene group may be substituted with optionally replaced by -O-, -COO- or -OCO-.
- 14. (Original) The silicon compound as described in claim 12, wherein in Formula (2), Z^1 is $-C_2H_4$ -; X is chlorine or bromine; and a is 0.
- 15. (Currently amended) A production process for the silicon compound represented by Formula (1) as described in claim 1, characterized by which comprises reacting a compound represented by Formula (3) with trichlorosilane having a halogenated sulfonyl group:

in Formula (3), seven R¹'s are groups independently selected respectively from the group consisting of hydrogen, alkyl, substituted or non-substituted aryland substituted or non-substituted arylalkyl; in this the alkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; and in the alkylene in moiety of the arylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or -CH=CH-.

16. (Currently amended) A production process for a silicon compound represented by Formula (5), <u>characterized by which comprises</u> reacting a compound represented by Formula (3) with a compound represented by Formula (4):

$$(R^{2})_{a}$$

$$C = Z^{2} - C_{2}H_{4} - SiCI_{3}$$

$$X - S = 0$$

$$(4)$$

wherein R¹ in Formula (3) is one group selected from the group consisting of alkyl having a carbon number of 1 to 8, phenyl, non-substituted naphthyl and phenylalkyl; in the alkyl group having a carbon number of 1 to 8, optional-hydrogen may be substituted with optionally replaced by fluorine, and optional -CH2- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; optional hydrogen in the phenyl may be substituted with optionally replaced by halogen, methyl or methoxy; in the phenylalkyl, optional hydrogen on a benzene ring may be substituted with optionally replaced by fluorine, alkyl having a carbon number of 1 to 4, ethenyl or methoxy, and optional -CH₂- in the alkylene moiety may be substituted with optionally replaced by -O-; R¹ in Formula (5) has the same meaning as that of R¹ in Formula (3); in Formula (4), X is halogen; R² is alkyl having a carbon number of 1 to 3; a is an integer of 0 to 2; Z² is a single bond or alkylene having 1 to 8 carbon atoms; in this the alkylene group having a carbon number of 1 to 8, optional -CH₂- may be substituted with optionally replaced by -O-, -COO- or -OCO-; both of the bonding positions of halogenated sulfonyl and R² on a the benzene ring are optional positions; and the meanings of X, R², and Z² in Formula (5) and the bonding positions of halogenated sulfonyl and R² on at the benzene ring are the same as those in Formula (4).

17. (Currently amended) A production process for the silicon compound represented by Formula (1) as described in claim 1, characterized by which comprises reacting a compound represented by Formula (6) with trichlorosilane having a halogenated sulfonyl group:

$$\begin{bmatrix}
R^{1} & & & & & \\
R^{1} & & & & & \\
R^{1} & & & & & \\
Si & & & & & \\
O & & & & & \\
O & & & & & \\
Si & & & & & \\
R^{1} & & & & & \\
R^{1} & & & & & \\
R^{1} & & & & & \\
\end{bmatrix}$$
3M (6)

in Formula (6), seven R¹'s are groups independently selected respectively from the group consisting of hydrogen, alkyl, substituted or non-substituted aryl and substituted or non-substituted arylalkyl; M is a monovalent alkali metal atom; in this the alkyl group, optional-hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; and in the alkylene in this moiety of the arylalkyl group, optional hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O- or -CH=CH-.

18. (Currently amended) A production process for a silicon compound represented by Formula (5), characterized by which comprises reacting a compound represented by Formula (6) with a compound represented by Formula (4):

in Formula (6), R¹ is one group selected from the group consisting of alkyl having a carbon number of 1 to 8, phenyl, non-substituted naphthyl and phenylalkyl; M is a monovalent alkali metal atom; in the alkyl group having a carbon number of 1 to 8, optional-hydrogen may be substituted with optionally replaced by fluorine, and optional -CH₂- may be substituted with optionally replaced by -O-, -CH=CH-, cycloalkylene or cycloalkenylene; optional-hydrogen in the phenyl may be substituted with optionally replaced by halogen, methyl or methoxy; in the phenylalkyl group, optional-hydrogen on a benzene ring may be substituted with optionally replaced by fluorine, alkyl having 1 to 4 carbon atoms, ethenyl or methoxy, and optional -CH₂- in the alkylene moiety may be substituted with optionally replaced by -O-;

R¹ in Formula (5) has the same meaning as that of R¹ in Formula (6); in Formula (4), X is halogen; R² is alkyl having 1 to 3 carbon atoms; a is an integer of 0 to 2; Z² is a single bond or alkylene having a carbon number of 1 to 8; in the alkylene group having a carbon number of 1 to 8, optional—-CH₂- may be substituted with optionally replaced by -O-, -COO- or -OCO-; both of the bonding positions of halogenated sulfonyl and R² on a-the benzene ring are optional positions; and the meanings of X, R², and Z² in Formula (5) and the bonding positions of halogenated sulfonyl and R² on a- the benzene ring are the same as those in Formula (4).

- 19. (Original) A polymer obtained by polymerizing a vinyl base monomer using the silicon compound represented by Formula (1) as described in claim 1 as an initiator and a transition metal complex as a catalyst.
- 20. (Currently amended) A polymer represented by Formula (7) obtained by polymerizing a vinyl base monomer using the silicon compound represented by Formula (1) as described in claim 18 as an initiator and a transition metal complex as a catalyst:

the meanings of R^1 , Z^2 , R^2 , a and X in Formula (7) and the bonding positions of halogenated sulfonyl and R^2 on a the benzene ring are the same as those in Formula (6) as described in claim 18, and P is a vinyl base polymer.

- 21. (Original) The polymer as described in claim 19 or 20, wherein the vinyl base monomer is at least one selected from the group consisting of a (meth)acrylic acid derivative and a styrene derivative.
- 22. (Original) The polymer as described in claim 19 or 20, wherein the vinyl base monomer is at least one selected from the group consisting of the (meth)acrylic acid derivatives.
- 23. (Currently amended) A polymerization process for a vinyl base monomer eharacterized by which comprises using the silicon compound represented by Formula (1) as described in claim 1 as an initiator and using a transition metal complex as a catalyst.
- 24. (Currently amended) A production process for the polymer represented by Formula (7) as described in claim 20, characterized by:

the meanings of R^1 , Z^2 , R^2 , a and X in Formula (7) and the bonding positions of halogenated sulfonyl and R^2 on the benzene ring are the same as those in Formula (6) as described in claim 18, and P is a vinyl base polymer, which comprises polymerizing a vinyl base monomer using the compound represented by Formula (5) as described in claim 18 as an initiator and using a transition metal complex as a catalyst.